

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 11099646 A

(43) Date of publication of application: 13 . 04 . 99

(51) Int. Cl.  
B41J 2/045  
B41J 2/055  
B41J 2/175

(21) Application number: 09263027

(22) Date of filing: 29 . 09 . 97

(71) Applicant: FUJI ELECTRIC CO LTD

(72) Inventor: KITADE YUJIRO

(54) INK JET RECORDING HEAD AND INK JET RECORDER

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an ink jet recording head having a function for self- diagnosing the trouble, and an ink jet recorder having high operational efficiency and reliability.

SOLUTION: A driving circuit for the piezoelectric element 16 in an ink jet recording head is provided with a charge amplifier 84. Time variation of charge supply is measured at the time of driving the piezoelectric element 16 and the pressure waveform of an ink pressure chamber 15 is grasped with reference to the charge quantity waveform when no ink is present in an ink channel thus detecting a situation where a bubble is present in the ink channel and a situation where the fluid resistance has increased due to presence of dust. The recorder detects a trouble in the recording head at nonprinting timing and drives a trouble eliminating means based on the detection results thus enhancing the reliability.

COPYRIGHT: (C)1999,JPO

